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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/537,738 03/29/00 RANGANATHAN

N II-1

EXAMINER

MM92/0816

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PO BOX 1073
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VERLEY, D
ART UNIT

PAPER NUMBER

2861
DATE MAILED:

08/16/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/537,738

Applicant(s)

RANGANATHAN ET AL.

Examiner

David Yockey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2000 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) ____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 20) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "the first separable component inserted completely into a second component" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Specification

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Objections

Claims 17-20 are objected to because of the following informalities: "grove" on line 10 of claim 17 should be "groove." Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 4 and 7-16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as

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to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 4 and 7-12:

The specification fails to describe "the first separable component inserted completely into a second component". As is clear from the specification and drawings neither the first nor the second element is completely inserted into the other. As best construed from the disclosure as a whole, the claims are considered with respect to the prior art as being directed to insertion to a point where front ends of the components abut one another and the components are locked in place.

Claims 13-16:

The specification fails to describe inserting the other component of the two-component coupler into a replaceable ink bottle.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2:

It is unclear if the "means for applying pressure to said tube" is intended to be part of the "means for causing ink flow;" insertion of a colon following "comprises" and disposition of "a flexible tube; and" indented on a separate line are respectfully

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recommended where the "means for applying pressure to said tube" is intended to be an element of the "means for causing ink flow."

Claim 12:

"said duplex valve" lacks antecedent basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niedermeyer et al. (US 5,343,226) in view of Ramacier, Jr. et al. (US 5,316,041) and Preszler (US 5,293,913).

Niedermeyer et al. teaches the claimed invention except the means for supplying ink to the reservoir independently of actuation by the reservoir.

Ramacier, Jr. et al. discloses a duplex connector consisting of a quick connect coupling valve assembly which facilitates fluid connection and disconnection without leakage. Note in particular Fig. 2 and, with respect to the fixed post limitation of claim 9, Figs. 23-24C.

Preszler teaches a means by which elements of a duplex coupler may be connected to an ink bottle and ink reservoir, i.e. by threaded connections.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the Ramacier, Jr. et al. duplex connector for the valve structure in the Niedermeyer et al. apparatus, where connections are provided as taught by Preszler, for the purpose of providing a valve assembly which facilitates quick fluid connection and disconnection without leakage.

The steps of the claimed method are deemed to be clearly obvious in view of the functions of the structure in the combination discussed above.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niedermeyer et al. (US 5,343,226) in view of Ramacier, Jr. et al. (US 5,316,041), Preszler (US 5,293,913), and Ito (US 6,053,603).

The combination of Niedermeyer et al. in view of Ramacier, Jr. et al. and Preszler, as discussed above with regard to claims 1-12 and 17-20, applies also to claims 13-16. This combination suggests the claimed invention except the insertion of the other component *into* a bottle; the combination suggests that the other component be attached *onto* a bottle.

Ito discloses providing a pipe 40a which extends into a bottle as part of a connector which connects the bottle to an ink reservoir (see in particular Fig. 4(d)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a pipe as taught by Ito extending from the other component for the purpose of facilitating connection of the other component to a bottle having a pierceable obstruction, including such well known obstructions as a foil or a rubber stopper.

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Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Allread et al. (US 5,406,980) discloses a quick connect coupling with a fixed post and a movable valve member surrounding the post in one component of the coupling and a poppet in the other component.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Yockey whose telephone number is (703) 308-3084. The examiner can normally be reached on all weekdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (703) 308-0750. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3432 for regular communications and (703)305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



**DAVID F. YOCKEY
PRIMARY EXAMINER**

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August 13, 2000